

Summary of Linkage Infrastructure Applications for Funding to Commence in 2006

New South Wales

University of Wollongong

LE0668470 Prof DW Griffith; Dr NB Jones; Dr SR Wilson; Prof PO Wennberg; Dr D Chen

Approved Project Title **High resolution Fourier transform infrared spectrometer for atmospheric remote sensing and laboratory spectroscopy**

2006 : \$250,000

Primary RFCD 2606 ATMOSPHERIC SCIENCES

Partner Organisation(s)

University of Wollongong
The University of Melbourne
California Institute of Technology

Administering Institution University of Wollongong

Project Summary

Climate change is a major global concern, with the potential for major consequences in Australia. This proposal contributes directly to climate change research relevant to Australia through direct measurements of the atmosphere relevant to the understanding of phenomena such as increasing greenhouse gas concentrations and stratospheric ozone depletion. Australia's geographical position in the less populated southern hemisphere, and its advanced scientific infrastructure, mean that it has an especially important and valuable role to play in global atmospheric research. The proposed research participates in several international research programmes.

LE0668322 A/Prof RA Lewis; Dr RE Vickers; Dr R Mendis; A/Prof D Abbott; Dr SP Mickan; Dr T Rainsford; Dr A Dowd; A/Prof AM Sanagavarapu

Approved Project Title **Enhancing Australia's Terahertz Infrastructure**

2006 : \$147,000

Primary RFCD 2909 ELECTRICAL AND ELECTRONIC ENGINEERING

Partner Organisation(s)

University of Wollongong
The University of Adelaide
University of Technology, Sydney

Administering Institution University of Wollongong

Project Summary

Anthrax, explosives, water, cancer all have characteristic signatures in the terahertz (THz) part of the electromagnetic spectrum. Security, defence, agriculture, medicine are a few of the fields where THz science and technology are booming. THz developments offer enhanced national security, prosperity and quality of life. Australia has active researchers in THz concentrated at several centres across the country, but they are hampered by their work by lack of access to state-of-the art experimental equipment. This project will provide that equipment and ensure the nation remains internationally competitive in this rapidly-developing field.

LE0668374 Prof SG Pyne; Prof G Otting; A/Prof WE Price; Dr SJ Blanksby; Prof JB Bremner; A/Prof PA Keller; Dr SF Ralph; Prof CJ Easton; Prof MG Banwell; Dr MG Casarotto; Prof AF Dulhunty; Prof PG Board

Approved Project Title **State-of-the-art NMR Facilities**

2006 : \$470,000

Primary RFCD 2503 ORGANIC CHEMISTRY

Partner Organisation(s)

University of Wollongong
The Australian National University

Administering Institution University of Wollongong

Project Summary

This proposal will significantly enhance the NMR research capability and capacities at UoW and ANU. These schools have internationally recognised strengths in fundamentals of synthetic organic chemistry, therapeutic drug design and synthesis, protein chemistry and structural biology. This equipment will enhance the productivity of these researchers, increase their collaborative and scientific outputs and allow for training of students in the latest technologies and importantly, contribute to Australia's development as a knowledge-based economy.